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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/521,210

03/08/2000

Hiroshi Tanaka

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07/15/2004

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EXAMINER

CHAWAN, SHEELA C

ART UNIT

PAPER NUMBER

2625

DATE MAILED: 07/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/521,210

Applicant(s)

TANAKA, HIROSHI

Examiner

Sheela C Chawan

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 61-80 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 61-65, 68-75 and 78-80 is/are rejected.
7) ☒ Claim(s) 66, 67, 76 and 77 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Request For Continuation Examination

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application 09/521,210 after allowance or after an Office action under *Ex Parte Quayle*, 1935 Comm'r Dec. 11 (1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 5/13/04 has been entered.

Response to Amendment

2. Applicant's amendment filed on April 02, 2004 (paper # 10/C) has been entered. In response to applicant's amendment claims 1- 60 are canceled. Claims 72- 78 are added new. Claims 61- 78 are pending in the application.

Claim Rejections - 35 U.S.C. § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the

effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 61-65, 68-70, 71-75, 78- 80 are rejected under 35 U.S.C. 102(e) as being anticipated by Uzawa et al. (US.6,333,786 B1).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

As to claim 61, Uzawa discloses a position detection apparatus for detecting a position of a mark on an object, said apparatus comprising:

a camera, which captures an image of the mark (fig 2, CM image pick up device, column 2, lines 5-17, column 3, line 57 through column 4, line 6);

an extraction section (fig 2, 24), which extracts an edge position of the mark based on the image of the mark (column 7, lines 57);

a determination section which determines a position of the mark by comparing the edge position with a template (column 7, line 58 through column 8, lines 46); and

a control section which changes at least one of a parameter (column 7, lines 35-57) used by extraction section and a parameter (fig 2, 24) used by said determination section, based on a result of the comparing by said determination section (column 9, lines 15- 27).

As to claim 71 see the rejection for claim 61.

As to claims 62 and 72, Uzawa discloses an apparatus wherein the parameter changed by said control section is stored in a memory and used as a base for processing to be executed later (column 3, lines 55-67, column 4, lines 1-6).

As to claims 63 and 73, Uzawa discloses an apparatus wherein said determination section performs the comparing by evaluating a degree of matching between the edge position and the template (fig 6(a), 7(a) and 9(a), column 7, lines 35-67, column 8, lines 1-46).

As to claims 64 and 74, Uzawa discloses an apparatus according wherein said determination section determines the position of the mark as a center position of the template based on the degree of matching (column 7, lines 35- 67, column 8, lines 1-46).

As to claims 65 and 75, Uzawa discloses an apparatus wherein said determination section performs the comparing using a correlation method (column 8, lines 1-46).

As to claims 68 and 78, Uzawa discloses an apparatus wherein the template includes a plurality of positions of interest (column 8, lines 16-31).

As to claims 69 and 79, Uzawa discloses an apparatus wherein a parameter used for at least one of a noise removal processing for the image and a correction of the edge position is changed based on a result of the comparing by said determination section (column 7, lines 35- 57, column 9, lines 15-27, column 11, lines 40-58, column 12, lines 4-33).

As to claims 70 and 80, Uzawa discloses an apparatus wherein said camera captures the image under a dark field illumination (column 6, lines 26- 34).

Allowable Subject Matter

4. Claims 66-67, 76-77 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Other prior art cited

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hamazaki et al. (US. 4,688,088) discloses position detecting device and method.

Murakami et al. (US. 4,639,604) discloses method and apparatus for detecting an edge position of a pattern and eliminating overlapping pattern signals.

Ina et al. (US. 5,160,957) discloses alignment and exposure apparatus.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheela C Chawan whose telephone number is 703-305- 4876. The examiner can normally be reached on Monday - Thursday 6 - 7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on 703-308-5246. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SCC
Sheela Chawan
Patent Examiner
Group Art Unit 2625
July 1, 2004


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